TABLE 8

Total and federally financed R&D expenditures at federally funded research and development centers, by FFRDC: FYs 2019–22 (Dollars in thousands)

FFRDC			otal		Federally financed				
	2019	2020	2021	2022	2019	2020	2021	2022	
All FFRDCs	22,737,500	23,514,241	24,921,476	26,524,014	22,338,855	23,133,501	24,509,691	25,962,005	
University- administered FFRDCs	6,946,262	7,003,132	6,850,276	7,165,067	6,796,696	6,867,741	6,700,555	7,015,547	
Ames Laboratory	33,612	32,844	34,214	38,520	33,211	32,302	34,016	38,032	
Argonne National Laboratory	810,693	859,658	856,568	962,973	787,513	840,237	832,400	934,724	
Fermi National Accelerator Laboratory	334,258	300,002	319,051	330,294	333,460	299,811	317,812	329,131	
Green Bank Observatory ^a	NA	NA	8,629	10,752	NA	NA	8,629	10,384	
Jet Propulsion Laboratory	2,709,063	2,638,412	2,388,355	2,417,556	2,709,063	2,638,412	2,388,355	2,417,556	
Lawrence Berkeley National Laboratory	872,237	916,082	966,972	1,031,716	807,967	862,965	910,428	971,554	
Lincoln Laboratory	1,103,870	1,115,927	1,136,133	1,142,615	1,084,953	1,093,081	1,110,465	1,119,338	
National Center for Atmospheric Research	199,476	188,484	181,010	188,238	187,615	175,316	161,163	171,310	
National Radio Astronomy Observatory	101,901	100,078	94,202	92,476	99,881	98,458	93,313	91,913	
National Solar Observatory	15,931	16,892	17,684	33,849	15,892	16,472	17,680	33,800	
NSF's National Optical-Infrared Astronomy Research Laboratory (NSF's NOIRLab)	38,262	72,686	75,251	81,505	28,760	69,685	73,393	79,193	
Princeton Plasma Physics Laboratory	91,271	107,662	115,505	120,347	91,119	103,856	113,591	119,828	
SLAC National Accelerator Laboratory	368,938	382,264	396,780	432,078	352,527	366,936	382,252	419,094	
Software Engineering Institute	140,954	141,291	120,443	129,316	140,940	141,291	120,443	129,316	
Thomas Jefferson National Accelerator Facility	125,796	130,850	139,479	152,832	123,795	128,919	136,615	150,374	
Nonprofit- administered FFRDCs	7,511,486	7,913,603	9,079,002	9,171,826	7,355,318	7,760,212	8,909,281	8,998,910	
Aerospace Federally Funded Research and Development Center	1,065,989	1,114,741	1,128,241	1,152,833	1,062,804	1,109,291	1,121,569	1,147,041	
Arroyo Center	37,956	35,248	38,304	40,856	37,956	35,248	38,304	40,856	
Brookhaven National Laboratory	590,470	595,466	637,658	655,988	561,030	569,925	620,000	639,527	
Center for Advanced Aviation System Development	174,123	180,634	230,484	189,490	152,539	163,497	207,828	164,992	
Center for Communications and Computing	68,371	67,072	65,255	74,759	68,371	67,072	65,255	74,759	
Center for Enterprise Modernization	174,712	190,408	263,661	235,436	173,127	190,408	263,661	235,317	

TABLE 8

Total and federally financed R&D expenditures at federally funded research and development centers, by FFRDC: FYs 2019–22 (Dollars in thousands)

			otal		Federally financed				
FRDC	2019	2020	2021	2022	2019	2020	2021	2022	
Center for Naval Analyses	96,697	95,874	96,391	93,567	96,697	95,874	96,391	93,567	
Center for Nuclear Waste Regulatory Analyses	6,987	6,762	5,630	4,323	6,340	6,359	5,233	3,595	
CMS Alliance to Modernize Healthcare	213,369	228,162	348,269	286,693	213,369	228,162	348,269	286,693	
Homeland Security Operational Analysis Center	54,751	44,736	34,888	52,984	54,751	44,736	34,888	52,984	
Homeland Security Systems Engineering and Development Institute	115,813	136,874	183,588	183,261	115,813	135,713	182,413	181,702	
Idaho National Laboratory	478,324	494,094	516,691	637,579	463,588	481,146	503,977	630,446	
Judiciary Engineering and Modernization Center ^b	7,331	6,765	5,493	na	7,331	6,708	5,493	na	
National Biodefense Analysis and Countermeasures Center	39,003	42,330	44,968	45,870	39,003	42,330	44,968	45,869	
National Cybersecurity Center of Excellence	22,205	23,557	33,671	27,955	22,205	23,557	33,671	27,955	
National Defense Research Institute	67,647	64,134	66,170	61,097	67,647	64,134	66,170	61,097	
National Renewable Energy Laboratory	455,016	511,585	559,151	603,356	405,923	456,336	497,047	536,683	
National Security Engineering Center	1,124,861	1,143,701	1,468,298	1,286,520	1,123,616	1,142,013	1,463,965	1,282,762	
Oak Ridge National Laboratory	1,470,372	1,632,684	1,760,578	1,803,543	1,454,122	1,616,580	1,746,756	1,789,100	
Pacific Northwest National Laboratory	1,012,136	1,071,249	1,168,268	1,294,614	993,733	1,053,982	1,142,925	1,266,328	
Project Air Force	48,325	46,936	47,966	46,517	48,325	46,936	47,966	46,517	
Savannah River National Laboratory ^c	na	na	191,803	182,654	na	na	189,428	179,848	
Science and Technology Policy Institute	9,080	9,256	9,784	10,593	9,080	9,256	9,784	10,593	
Systems and Analyses Center	177,948	171,335	173,792	201,338	177,948	170,949	173,320	200,679	
Industry-administered FFRDCs	8,279,752	8,597,506	8,992,198	10,187,121	8,186,841	8,505,548	8,899,855	9,947,548	
Frederick National Laboratory for Cancer Research	751,452	745,726	861,605	904,182	751,452	745,726	861,605	904,182	
Lawrence Livermore National Laboratory	1,517,429	1,558,071	1,613,673	1,659,808	1,480,978	1,526,467	1,580,263	1,633,185	
Los Alamos National Laboratory	2,461,275	2,722,375	2,974,164	3,811,602	2,440,514	2,701,388	2,950,380	3,629,955	

TABLE 8

Total and federally financed R&D expenditures at federally funded research and development centers, by FFRDC: FYs 2019–22

(Dollars in thousands)

	Total				Federally financed			
FFRDC	2019	2020	2021	2022	2019	2020	2021	2022
Sandia National Laboratories	3,373,217	3,395,241	3,542,756	3,811,529	3,340,658	3,358,481	3,507,607	3,780,226
Savannah River								
National Laboratory ^C	176,379	176,093	na	na	173,239	173,486	na	na

na = not applicable. NA = not available; data were not provided by institution.

FFRDC = federally funded research and development center; NSF = National Science Foundation.

Source(s):

National Center for Science and Engineering Statistics, FFRDC Research and Development Survey.

^a Prior to the FY 2021 collection, the National Center for Science and Engineering Statistics discovered that the Green Bank Observatory had split from the National Radio Astronomy Observatory on 1 October 2016; both retained FFRDC status. For FYs 2017–20, R&D expenditures reported for the National Radio Astronomy Observatory included the expenditures for the Green Bank Observatory. The Green Bank Observatory began reporting separately on the FY 2021 survey.

^b The Judiciary Modernization Engineering Center was decertified as an FFRDC on 31 January 2021.

^c In FY 2021, Savannah River National Laboratory acquired a new nonprofit administrator: Battelle Savannah River Alliance, LLC. Prior to the FY 2021 collection, Savannah River National Laboratory was administered by an industrial firm administrator: Savannah River Nuclear Solutions, LLC.